Black Mountain Allotment Grazing Environmental Assessment
EA-NV-030-08-20
4000

I. INTRODUCTION/PURPOSE AND NEED

A. Introduction

This environmental assessment (EA) analyzes the impacts resulting from the renewal of the Term Grazing Permit for the Black Mountain Allotment. The basis for this EA is the Standards and Guidelines (S & G's) Assessment that was completed by an interdisciplinary team.

On February 12, 1997, Bruce Babbitt, then Secretary of the Interior, approved the S & G's for Rangeland Health and Grazing Management to be applied to Bureau of Land Management (BLM) public lands in the State of Nevada, under the administration of the Carson City Field Office (CCFO). These S & G's were developed in consultation with the Sierra Front-Northwestern Great Basin Resource Advisory Council.

S & G's are being implemented through two processes; (1) determination that the terms and conditions of the grazing permit are consistent with the S & G's applicable to all Allotments and/or (2) the Allotment Evaluation (AE) process to determine whether or not the current grazing system is expected to achieve the specific resource goals and objectives identified in the Coordinated Resource Management Plan (CRMP), approved on May 9, 2001.

B. Purpose and Need

The purpose of the proposed action is twofold; (1) Administer grazing in a manner consistent with the attainment of site specific objectives found in the CRMP, and (2) Implement grazing practices that would ensure compliance with the approved S & G's for the CCFO.

The need for the proposed action stems from BLM's mandate to conduct grazing activities in an ecologically sound manner. Grazing use of this Allotment and guidelines for making such use are found in the provisions of the Taylor Grazing Act (TGA) of 1934 (as amended), the Federal Land Policy and Management Act (FLPMA) of 1975, the Public Rangelands Improvement Act (PRIA) of 1978, and the approved S & G's of 1997, as well as various other federal laws and regulations.

C. Land Use Plan Conformance Statement

The proposed action and alternatives described in this document are in conformance with the CCFO-CRMP desired outcomes. For livestock grazing, these are found on page LSG-1 and are as follows:

1. Maintain or improve the condition of the public rangelands to enhance productivity for all rangeland and watershed values.
2. Initially, manage livestock use at existing levels.
3. Provide adequate, high quality forage for livestock by improving rangeland condition.
4. Improve overall range administration.

Additional Guidance: Black Mountain S & G's Assessment, developed by an interdisciplinary team and approved by the Authorized Officer in 2007; Riparian – Wetland Initiative (1991).

Interdisciplinary teams made up of various BLM resource specialists conduct S & G Assessments. This Assessment considered impacts on a wide variety of resources, including cultural resources and the relationship of grazing as to meeting or making progress towards the meeting the S&G's. The Sierra Front-Northwestern Great Basin S & G's are as follows:

Soils: Soil processes will be appropriate to soil types, climate and land form as indicated by: 1) Surface litter is appropriate to the potential of the site; 2) Soil crusting formation in shrub interspaces, and soil compaction are minimal or not in evidence, allowing for appropriate infiltration of water; 3) Hydrologic cycle, nutrient cycle and energy flow are adequate for the vegetative communities; 4) Plant communities are diverse and vigorous and there is evidence of recruitment; and 5) Basal and canopy cover (vegetative) is appropriate for site potential. **(Meeting Standard)**

Riparian/Wetlands: Riparian/wetland systems are in proper functioning condition as indicated by: 1) Sinuosity, width/depth ratio and gradient are adequate to dissipate streamflow without excessive erosion or deposition; 2) Riparian vegetation is adequate to dissipate high flow energy and protect banks from excessive erosion; and 3) Plant species diversity is appropriate to riparian-wetland systems. **(Standard does not apply)**

Water Quality: Water quality criteria in Nevada and California State Law shall be achieved or maintained as indicated by: 1) Chemical constituents do not exceed the water quality standards; 2) Physical constituents do not exceed the water quality standards; 3) Biological constituents do not exceed the water quality standards; and 4) The water quality of all water bodies, including ground water located on or influenced by BLM lands will meet or exceed the applicable Nevada or California water quality standards. Water quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements as set forth under State law, and as found in Section 303(c) of the Clean Water Act. **(Standard does not apply)**

Plant and Animal Habitat: Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse as indicated by: 1) Good representation of life forms and numbers of species; 2) Good diversity of height, size, and distribution of plants; 3) Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and 4) Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation. **(Meeting Standard)**

Special Species Habitat: Habitat conditions meet the life cycle requirements of special status species as indicated by: 1) Habitat areas are large enough to support viable populations of special status species; 2) Special status plant and animal numbers and ages appear to ensure stable populations; 3) Good diversity of height, size, and distribution of plants; 4) Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and 5) Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation. **(Meeting Standard)**

II. PROPOSED ACTION AND ALTERNATIVES

A. PROPOSED ACTION

This alternative would allow grazing to continue for a total of 900 AUMs harvested between 10/01 and 02/28.

A well, storage tank and troughs are being proposed for potential construction at NAD83, E334915, N4305625. This would provide another permanent water source whereby the dependence upon snow for livestock distribution would be eliminated. In this manner the vegetation can be utilized in a more uniform manner.

The construction of the proposed improvement is dependent upon funding availability, manpower, and policy guidance.

B. NO GRAZING ALTERNATIVE

This alternative would eliminate livestock grazing entirely.

C. CONVERSTION TO A YEAR ROUND OPERATION

This alternative would change the Allotment to a year-round operation. Under this proposal the 900 AUMs could be utilized at any time during the year (e.g., 4560 sheep could be grazed from 11/01 to 11/30). The option would be available to make use in a shorter or longer period of time with more or fewer animals. The total number of AUMs could not be exceeded.

III. AFFECTED ENVIRONMENT

A. Scoping and Issue Identification

A scoping letter was sent to the interested public to identify those individuals and organizations interested in specific actions on specific Allotments under the jurisdiction of the CCFO. The purpose of this scoping letter was to gather information and determine who would be further interested in participating in actions pertinent to specific Allotments.

Standard operating procedures direct the BLM to supply the State Clearinghouse with a copy of this document for distribution amongst State Agencies. In addition, copies will be sent to the following entities:

Permittee(s) of Record Resource Concepts, Inc. Mineral County Commissioners
Western Watersheds Project

Internal scoping amongst BLM staff specialists is an ongoing process as is Native American consultation by the cultural staff.

B. Proposed Action

General Setting

Black Mountain Allotment (03507) is located in Mineral County, approximately 12 miles east-southeast of Yerington, Nevada. The Walker River Indian Reservation forms the eastern boundary, while Reese River Canyon forms the southern boundary. It is generally mountainous, with elevations ranging from approximately 4100 to 8102 feet. There is a total of 14,618 acres of public land, no private land and no fenced pastures.

Critical Elements of the Human Environment

The following critical elements of the human environment are not present or are not affected by the proposed action or alternatives in this EA: (specifically required by statute, regulation, executive order, etc.)

Critical Element	Not Present *	Present/Not Affected *	Present/May Be Affected**
Air Quality		X	
Areas of Critical Environmental Concern	X		
Cultural Resources[1]		X	
Environmental Justice	X		
Farm Lands (prime or unique)	X		
Floodplains	X		
Invasive, Nonnative Species	X		
Native American Religious Concerns		X	
Threatened or Endangered Species	X		
Wastes, Hazardous or Solid	X		
Water Quality (Surface/Ground)	X		
Wetlands/Riparian Zones	X		
Wild and Scenic Rivers	X		
Wilderness	X		

**Critical Elements determined to be Not Present or Present/Not Affected need not be carried forward or discussed further in the document.*
***Critical Elements determined to be Present/May Be Affected must be carried forward in the document.*

[1] For further details regarding the assessment of grazing impacts upon cultural resources, refer to the *Carson City Field Office's Protocols for Rangeland Activities in Compliance with Section 106 of the National Historic Preservation Act per Washington Office IM No. 99-039 and Nevada State Office IM No. NV-99-021.*

A consultation letter was sent to the Walker River Paiute Tribe on November 29, 2007, concerning the permit renewal for the Black Mountain Grazing Permit Renewal. Several attempts were made to make contact with both the environmental and cultural resource contacts for the Tribe, however due to changes in personnel no comments were provided by the tribe specific to this permit renewal.

During a telephone conversation with the new Chairman for the Tribe (March 31, 2008), he stated that the BLM should continue to send information concerning any new proposals. Therefore, per 36 CFR Part 800 and 43 CFR Part 8100 (BLM), as amended, BLM would conduct Native American coordination and consultation for any future proposed projects within this grazing allotment. Specifically, prior to any of the currently proposed or future implementation of range improvements, the Tribe will be provided detailed information on the proposed action and afforded at least 30 days to comment on each action. BLM will follow 36 CFR Part 800 and 43 CFR Part 8100 (BLM), as amended, and consider each Tribal comment prior to any approval or denial of any improvement associated with this permit renewal.

All projects with the potential to affect cultural resources are required to have a cultural resource inventory conducted over the project area. Determinations of cultural resource eligibility and project effect will be made through consultation with the Nevada State Historic Preservation Office. Any National Register eligible or listed properties within the project area will be either avoided or mitigated to a No Adverse Effect: project determination pursuant to Section 106 of the National Historic Preservation Act. A Class I review of previously conducted projects and recorded cultural resources, as well as, intuitive assessments for cultural resources will be evaluated for potential impacts due to grazing. Reconnaissance for impacts will be conducted based upon this evaluation and mitigation will be implemented if identified. Cultural resources identified during the reconnaissance will be recorded and evaluated.

Following BLM regulations (43 CFR Part 8100) and other federal laws including the National Historic Preservation Act (16 USC § 470f) and its implementing regulations (36 CFR Part 800), as amended, BLM reviewed the immediate region for historic properties prior to a federal undertaking (issuance of a federal permit). The potential exists for adverse impacts to cultural resources and/or historic properties due to a continuation of livestock grazing with or without modifications to the grazing permit. By definition, an historic property is a "prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" and includes "artifacts, records, and remains that are related to and located within such properties" (36 CFR 800.16(l)(1)).

Based on research of files at the Carson City Field Office and the Nevada State Museum, the allotment contains some locations of known cultural resources. To date, in and immediately adjacent to the BLM-managed lands of the Black Mountain Allotment, known cultural resources represent significant past human use of the landscape. Previous inventory within allotment comprises 234 acres, or 1.6 percent of the total allotment area, and has identified one historic property. This site includes extensive lithic debitage scatter, petroglyphs, rock alignments, and rock-lined depressions. Other cultural resources within the allotment include historic-period debris scatters, mining complexes, prospects, and transportation sites. Further details on local site types and the potential for effects to historic properties from livestock activities associated with the issuance of a

grazing permit are available in a technical report prepared for this permit renewal (CRR 3-2436, Lane 2008) and the published Carson City District Cultural Resources overview report (Pendleton et al. 1982).

Based on review of range use data, reports on areas previously inventoried in or near the allotment, and archaeological field reconnaissance, livestock grazing is not a known significant impact to historic properties (Lane 2008). Therefore, relative to cultural resources, there exists no need to alter the proposed term grazing allotment permit proposed action for the Black Mountain allotment in order to prevent unnecessary or undue degradation.

BLM analyses included the potential impacts of implementing the allotment improvement provided above under the Proposed Actions and Alternatives. Fieldwork at the location of this improvement was completed in May 2008, and based on the review by a BLM Archaeologist, the specific allotment improvement identified as a proposed well is not known to have a significant impact to historic properties (Lane 2008). Therefore, relative to cultural resources, there exists no need to alter the proposed term grazing allotment permit proposed allotment improvements for the Black Mountain allotment in order to prevent unnecessary or undue degradation.

Additional allotment improvements may be part of the issuance of this grazing permit, but all proposed project improvements have the potential to adversely affect cultural resources. Per 36 CFR Part 800 and 43 CFR Part 8100 (BLM), as amended, BLM is required to identify and evaluate cultural resource within the area of potential effect from an undertaking such as a waterline, fence, creation of new water haul locations, or other area that involves ground disturbance or that concentrates livestock. Any historic properties identified, documented, and evaluated as eligible for inclusion in the National Register of Historic Places within a proposed improvement area of potential effect will be avoided by proposed improvements. If these cannot be accomplished, specific project undertakings will be cancelled, or the allotment use will be modified to result in no adverse effect to the historic property(ies) pursuant to 36 CFR Part 800, and in consultation with the local tribal entity and the Nevada State Historic Preservation Office.

Bureau specialists have further determined that the following resources, although present in the project area, are not affected by the proposed action or alternatives:

Forestry	Internal Scoping
Geologic Resource/Minerals	Internal Scoping

Since the proposed action or alternatives appear to neither impact nor be impacted by these resources, no further discussion will be included.

Resources Present and Brought Forward for Analysis:

The description of the affected environment for the proposed action/no action and the other two alternatives would be the same as that for the proposed action.

Vegetation

The Allotment contains a variety of vegetation including but not limited to low sagebrush, shadscale and Bailey greasewood. This vegetation is typically located on the lower foothill and plateau country. Pinyon-juniper woodlands are located at the higher elevations, surrounding a small snow lake. Other common plant species that may be present include bluegrass, sand dropseed, bottlebrush squirrreltail, Indian ricegrass, winterfat and big sagebrush, along with a variety of forbs.

Range/Livestock

The recognized preference is 900 AUMs. The Allotment has a public land rating of 100% and the period of use runs from 10/01 to 02/28. There are no fenced pastures.

Recreation

Within the Black Mountain allotment limited dispersed, casual recreational use occurs that generally consists of off-highway vehicle riding and driving, rock hounding, and hunting. Use occurs year round, however; most of the dispersed use occurs in the spring and fall months.

An annual fall Off-highway vehicle (OHV) event is typically permitted that utilizes a limited amount of roads and trails within the allotment.

Soils

The soils within the Black Mountain Grazing Allotment vary considerably in physical, chemical, and biological characteristics. Parent material, surface and subsurface textures and rock fragments, elevation, aspect, and slope determine the inherent productivity. Erosion and runoff potential, while affected greatly by these factors, are also dependant upon the basal and canopy cover of vegetation on site. Also, roads, livestock and horse use, mining and other overland activities, and general motorized vehicle use have impacted soils in certain areas. Generally the soils in this allotment are classified as Entisols or Aridisols, with much of the area in the eight inch precipitation zone. Soil reactions are slightly to moderately alkaline. Detailed descriptions of the soils within the allotment can be found within the Mineral County Soil Survey, issued in 1991 by the U.S. Dept. of Agriculture-Soil Conservation Service.

Invasive/Nonnative/Noxious Weeds

There are no noxious weed infestations that have been located within the allotment.

General Wildlife

Several terrestrial wildlife habitats occur within the allotment area (Nevada Wildlife Action Plan 2006). This allotment hasn't been grazed for about 10 years due to persistent drought. Grasslands are dominated by squirreltail. Some galleta and Indian ricegrass are present. There is evidence of past abundant prince's plume. This plant is cyclic and may not be present in drought times. It is also a grazing intolerant plant and finding standing

dead plant aftermath indicates a lack of grazing issues. Most of the lower elevation is desert pavement which is a natural condition, but makes plant occurrence scattered. Some buckwheat is present including the species *inflatum*. There are healthy, diverse cryptogams on the rocks. There is some hairy black phytogryptogams on the ground. The occurrence of these organisms is indicative of overall landscape stability (Ladyman and Muldvin 1996). The land is in particularly good shape for experiencing a 10 year drought. If overgrazing had been occurring prior to the drought, the vegetation seen would not have been present – drought would have eliminated it quickly.

This allotment's west side is in a natural rain shadow and receives little precipitation. General wildlife populations are naturally not as diverse nor are they particularly abundant due to the natural vegetation and moisture conditions. Wildlife habitats found on the allotment are,

Intermountain Cold Desert Scrub – Historically, this habitat would have been dominated by Indian rice grass. Spiny hopsage, shadscale and chenopods would have been found at the lower elevations of this allotment. These species can still be found on the allotment. Wildlife species associated with this habitat type include pale kangaroo mouse, Great Basin collared lizard and black-throated sparrow (Nevada Wildlife Action Plan 2006).

Sagebrush – At the upper elevations, Wyoming sage brush and low sagebrush occur. Some grasses and forbs can be found and can be abundant in better moisture years. Great Basin pocket mouse, sagebrush lizard and sage sparrow are species associated with this habitat type (Nevada Wildlife Action Plan 2006).

Lower Montane Woodlands - Singleleaf pinyon and Utah juniper are the dominant vegetation types in this habitat. Mountain mahogany may be present at the upper elevations of this habitat. Forbs and grasses are sparse, especially as the canopy closure increases as is the case in this allotment. Cliffrose and bitterbrush are key mule deer forage species in this habitat type. This is being crowded out by woodland encroachment. Wildlife species such as short-horned lizards, gray fox and gray vireo can be found in this habitat type (Nevada Wildlife Action Plan 2006).

An ephemeral snowmelt lake occurs on top of the highest mountain associated with this allotment. It doesn't support riparian vegetation, but has Williams combleaf habitat (Tonenna 2007). There are very limited water sources in the allotment otherwise; one seasonal well in the northwest portion of the allotment.

This allotment is not within a BLM designated Wildlife Habitat Management Area. A few pronghorn may be found in this allotment, but no large herds have been reported. The allotment isn't ideal habitat for pronghorn because greasewood and shadscale shrubs dominate the lower foothills where pronghorn would occur. Lack of natural precipitation and natural desert pavement disallows abundant forb crops which would limit pronghorn use. The Palouse-like side slopes of some portions of the allotment are dominated by talus and grasses, a habitat pronghorn don't use extensively due to the slope.

The western side of the allotment is considered mule deer winter range. No key mule deer areas occur in this allotment at this time. However, the Palouse-like slopes on some of this allotment do provide an important spring forage area during spring green-up. Extended drought has caused the general Wassuck Mountain area, including this

allotment, to be in a temporary less than ideal condition for mule deer. As stated, basic good quality vegetation components are present and should recover if normal precipitation returns.

In 1966, the top of the mountain in this allotment was identified as deer yearlong range (Nevada Fish and Game Commission 1966). However, a 1973 wildlife report indicated that deer summer ranges were generally lacking and limited year round numbers (Berg 1973). There are currently no key mule deer areas associated with the Black Mountain allotment. Since the 1966 assessment, pinyon juniper encroachment has robbed the higher elevation summer area of shrubs and other deer forage. Poor summer range conditions translate into poor fawn production and lowered recruitment into the population (Peek and Krausman 1995). Natural conditions coupled with low population levels in the western U.S. have left just a few deer using this area.

Another factor affects deer numbers on this allotment. Deer use the snowmelt lake located on top of Black Mountain. Mountain lions, kept at artificially high levels by wild horse availability as a food source when deer cycles are low, may be suppressing the already low deer numbers. This effect has been seen in deer and elk and is termed a "predator pit" (Zwoll 1998). In a natural situation, predators cannot suppress a deer population. However, when deer numbers are low, predators can keep a population suppressed (McShea 197).

Black Mountain allotment is historic bighorn range. However, these have not been re-introduced due to domestic sheep being grazed in this allotment. The allotment is still considered potential bighorn sheep habitat (NDOW 2007).

Mountain lions are apparently abundant and may utilize wild horses as a major food source rather than mule deer, at least during cyclic deer population declines. Under normal conditions, mountain lion populations cycle like deer populations, just slightly later. Use of wild horses may be holding lion populations artificially high when deer numbers are low.

Upland game birds using this allotment would include mourning dove, mountain and California quail, and the exotic chukar partridge**.** No sage grouse are found on this allotment. Habitat for chukar is especially good because of the sparser vegetation associated with the drier portions of the allotment. Water availability limits mourning dove and natural conditions won't support large numbers of quail.

The west side of this allotment receives intense OHV use including commercial races throughout the area. This activity makes habitat less suitable for general wildlife and some game species (Ouren et al 2007).

The allotment has also been identified by the Nevada Division of Wildlife as potential elk habitat.

Special Status Species

BLM Sensitive Species

BLM Manual 6840 defines sensitive species as "…those species not already included as BLM Special Status Species under (1) Federal listed, proposed or candidate species; or

(2) State of Nevada listed species. Native species may be listed as "sensitive" if it: (1) could become endangered or extirpated from a state or significant portion of its range; (2) is under review by the FWS/NMFS; or (3) whose numbers or habitat capability are declining so rapidly that Federal listing may become necessary, or (4) has typically small and widely dispersed populations; (5) inhabits ecological refugia, specialized or unique habitats; (6) is state-listed, but is better conserved through application of the BLM sensitive species status." It is BLM policy to provide sensitive species with the same level of protection that is given federal candidate species. The major objective of this protection is to preclude the need for federal listing (BLM 2003). BLM sensitive wildlife species associated with this allotment are shown in Appendix A. There aren't any known BLM sensitive plant species associated with this allotment.

A few of the listed BLM sensitive species use every habitat within the allotment to a greater or lesser extent yearlong. The extended drought has had an effect on forage production, which affects seed and prey species numbers, which affects use by sensitive species. Current conditions for sensitive species are not ideal due to the drought. As stated, basic good quality vegetation components are present and should recover if normal precipitation returns.

There are probably fewer species on the west side, lower elevations than should occur. The lower west side of this allotment receives intense OHV use including commercial races. In a study, it was found that areas with lower OHV use had statistically significant greater species diversity. Some BLM sensitive species would be impacted by this activity through spatial conflict or habitat fragmentation / destruction (Ouren et al 2007).

The allotment lies within the Mount Grant Sage Grouse Population Management Unit (PMU). The Greater Sage-Grouse Conservation Plan for Nevada and Eastern California, June 30, 2004, Appendix L – Mount Grant PMU covers this population. Sage grouse within this area are part of the Mono/Lyon population segment which has been the subject of several petitions to be listed under the Endangered Species Act, and may quality as a Distinct Population Segment. Objectives listed in Appendix L include removing pinyon and juniper trees and re-establishing big sagebrush on sites that previously supported the vegetation type. Also, manage distribution of livestock to avoid critical nesting habitat.

Sage grouse require sagebrush habitats for all phases of their life cycle. Winter habitat includes sagebrush tall enough to be available when snow is present for food and cover. Pre-nesting habitat includes sagebrush with forbs. Nesting habitat includes areas with sagebrush and residual grass cover tall and thick enough to conceal and mitigate temperature extremes. Brood rearing habitat includes succulent forms found within the sagebrush community and often wet meadows. Leks have not been identified nor any nesting habitat with this allotment.

<u>Migratory Birds</u>

On January 11, 2001, President Clinton signed Executive Order 13186 (Land Bird Strategic Project) placing emphasis on conservation and management of migratory birds. The species are not protected under the Endangered Species Act, but most are protected under the Migratory Bird Treaty Act of 1918. Management for these species is based on Instruction Memorandum – IM 2008-050 dated December 18. 2007. The Intermountain West is the center of distribution for many western birds. Over half of the biome's

Species of Continental Importance have 75% or more of their population here. Many breeding species from this biome migrate to winter in central and western Mexico or in the Southwestern biome (Beidleman 2000).

There is no Important Bird Areas (IBA) associated with the general project area. There are no identified important wintering areas within the general project area.

Seed, flower and prey species production is being severely limited by the drought. This condition is coupled with the natural condition of the allotment being in a low precipitation zone. As stated above, extended drought is currently affecting the condition of the vegetation in the allotment and would limit most migratory bird use to shorter time periods, and visitation by more tolerant species. There are no riparian areas in the allotment since the only free water is provided by a seasonal well and the snowmelt lake that doesn't support a true riparian community.

Some migratory bird species use every habitat within the allotment. Current habitat conditions, other than drought years, are meeting requirements for migratory birds that would be expected in this allotment. Basic, quality vegetation components are present and should recover if normal precipitation returns. Some naturally occurring washes in the foothills of this allotment have sides high enough to support holes which currently serve swallows as nest sites.

The species of concern that could occur in the general project area are shown in Appendix B (BLM 2007).

Wild Horses

Black Mountain, Butler Mountain and Gray Hills Allotments comprise the Wassuk Herd Management Area (HMA). They contain 20,400, 4,300, and 25,400 acres, respectively, of the HMA (Refer to Map No. 3, Appendix I). The initial appropriate management level (AML) identified in the Land Use Plan (LUP) was 151 head for the entire HMA, totaling 1,812 AUMs. The Final Multiple Use Decision (FMUD), issued on September 5, 1997, established 234 AUMs available for wild horses within the Black Mountain Allotment.

Census data for the entire HMA is as follows:

Date of Census	Adults/Foals	Total Number of Head
07/27/2000	61/11	72
07/08/1998	77/17	94
11/13/1997	76/3 (Incomplete Count)	79
06/16/1995	118/23	141
08/04/1994	96/20	116
07/22/1993	111/12	123
11/13/1991	154/3	157

IV. ENVIRONMENTAL CONSEQUENCES

A. PROPOSED ACTION

Vegetation

Under this alternative the period of use would continue to occur during the fall and winter period. This is when the plants have gone into dormancy and are least affected by grazing. The total AUMs would remain the same.

Range/Livestock

The total amount of use would remain at 900 AUMs for the period of 10/01 to 02/28. The addition of the proposed well would provide the opportunity to more evenly distribute use within the allotment.

Recreation

The implementation of this alternative would have little to no effect on the recreation resources and uses in the project area.

Soils

The implementation of this alternative would have little effect on the soil resource since at present the grazing system is meeting the soils standards.

Invasive/Nonnative/Noxious Weeds

The implementation of this alternative would have little effect on noxious weed populations since there have been none located within the allotment.

General Wildlife

The rangeland health assessments completed for this allotment indicated that soils are stable in the allotment and supported functional plant groups that would be expected on this site. Because general wildlife habitat is in good, though drought affected condition, current moderate permitted levels of livestock grazing aren't impacting general wildlife habitats in the allotment (Guthrey 1995). This grazing alternative is better for general wildlife habitats than the yearlong alternative.

Although domestic sheep and pronghorn would use the same area during the winter, pronghorn are not affected by this class of livestock, especially in the winter (Yoakum et al 1993). Neither forage nor spatial conflicts would be expected to occur, especially since the allotment is in good condition with the exception of drought conditions.

Current permitted levels of livestock grazing are not affecting mule deer. Livestock grazing would occur when wintering deer are on the allotment. In most cases, livestock would use gentler terrain while deer would use foothills and rougher country (Peek and Krausman

1995). This particular allotment wouldn't have snow levels that would concentrate domestic and mule deer users during the winter. There wouldn't be detrimental forage overlap between the domestic sheep and deer due to the physical separation. This grazing alternative is better for mule deer than the yearlong alternative.

Grazing of domestic sheep would not affect mountain lion use of the allotment.

Moderate grazing levels on upland areas as have been practiced in recent years, and that are proposed for this action, would not have an affect on upland game bird species (Guthery 1995).

Although general wildlife individuals, especially game animals might use the water associated with the new well, populations wouldn't increase. Winter water is less important than summer water. Addition of the new water wouldn't affect general wildlife.

Special Status Species

BLM Sensitive Species

Livestock grazing allows some species to respond positively, some to respond negatively and some to have a mixed response (Finch et al 1993). This means only that some species may use a grazed area more, some may use it less. It doesn't necessarily preclude the presence of a species (Fagerstone and Ramey 1995). Livestock grazing in this allotment is not a threat to the BLM sensitive species because this allotment is in acceptable functioning condition overall for soils and vegetation. Additionally, since grazing occurs in winter when vegetation is dormant, any chance for impacts to sensitive species habitats would be nearly negligible.

Some BLM sensitive species individuals may use the new water, however, winter water is less important than summer. Populations wouldn't build on the new water source. Bird ladders will be installed in troughs to mitigate drowning. The new well wouldn't affect BLM sensitive species.

Neo-tropical Migratory Birds

Livestock grazing allows some species to respond positively, some to respond negatively and some to have a mixed response (Finch et al 1993). This means only that some species may use a grazed area more, some may use it less. It doesn't necessarily preclude the presence of a species. Livestock grazing was not listed as a threat to loggerhead shrike (www.natureserve.com). Heavy livestock grazing can be an issue for Brewer's sparrow and sage thrasher (www.natureserve.com, Finch et al 1993) as well as Sage Sparrow, Brewer's sparrow, Ferruginous Hawk, Gray Vireo, Burrowing Owl and Prairie Falcon (Neel 1999; Beidleman 2000, Nevada Wildlife Action Plan 2006).

The moderate to light grazing that is occurring in this allotment would not have a noticeable impact on these individuals or populations. The basic, good quality vegetation communities are in place albeit in drought condition. Additionally, since grazing occurs in winter when vegetation is dormant, any chance for direct impacts to migratory bird reproductive habitats would be nearly negligible. Because this allotment is in acceptable functioning condition for soils and vegetation, migratory birds that nested or foraged in this allotment would not be affected by the currently permitted grazing. Livestock grazing has not be identified as a management issue for the other species shown in Appendix B (Neel 1999; Beidleman 2000, Nevada Wildlife Action Plan 2006, Floyd 2007).

Some migratory bird individuals may use the new water, however, winter water is less important than summer. Populations wouldn't build on the new water source. Bird ladders will be installed in troughs to mitigate drowning. The new well wouldn't affect migratory birds.

Wild Horses

The situation would remain the same. The population of wild horses appears to be healthy with annual recruitment occurring.

B. NO GRAZING ALTERNATIVE

Vegetation

An improvement in vegetative conditions should initially result when effective precipitation patterns return to the area. There could be an increase in the number of grass species, although the wild horse population would still be present and utilize these plants. The majority of shrubs would not be utilized due to the absence of livestock grazing. Forb species would be available for the sole use of wildlife species.

Range/Livestock

This would no longer be an issue.

Recreation

The implementation of this alternative would have little to no effect on the recreation resources and uses in the project area.

Soils

The implementation of this alternative could have a small positive effect on the soil resource within the allotment due to the elimination of vegetative utilization by livestock.

Noxious Weeds/Nonnative/Invasive Species

The implementation of this alternative would have no effect on noxious weed populations.

General Wildlife

This alternative would be the most ideal for general wildlife, game, BLM sensitive species and migratory birds. There would be no opportunity for impacts from livestock grazing. However, because of the stable, functioning condition of much of the soil and vegetation on this allotment, benefits derived from this alternative compared to the proposed action could be difficult to distinguish. Under this alternative, spatial conflicts and fragmentation / degrading of some BLM sensitive and migratory bird habitats used by OHV would continue.

The proposed well wouldn't be constructed. This would have minimal effects on general wildlife.

Special Status Species

This alternative would be the most ideal for general wildlife, game, BLM sensitive species and migratory birds. There would be no opportunity for impacts from livestock grazing. However, because of the stable, functioning condition of much of the soil and vegetation on this allotment, benefits derived from this alternative compared to the proposed action could be difficult to distinguish. Under this alternative, spatial conflicts and fragmentation / degrading of some BLM sensitive and migratory bird habitats used by OHV would continue.

The proposed well wouldn't be constructed. This would have minimal effects on special status species.

Wild Horses

Wild horses would be the only grazing animal remaining. Under this alternative, more horses could potentially inhabit the Allotment if an adjustment were to be made to the Appropriate Management Level (AML). However, the Bureau is spending approximately 20 million dollars a year to feed wild horses already removed from public lands for which adoption demand does not exist. By increasing the number of horses within a Herd Management Area the excess horse problem would be exasperated. Initially a gather could be delayed by a few years, however, after the first several years there would be many more mares producing foals so the result would be a greater number of excess horses per year by increasing the AML.

C. CONVERSION TO A YEAR-ROUND OPERATION ALTERNATIVE

Vegetation

The vegetation is utilized year long by wild horses. The primary forage of choice is grasses. The potential exists to have two kinds of animals utilizing the vegetation during the active growing season. Depending upon the amount of use requested and authorized, this action can be either beneficial or detrimental.

Range/Livestock

Under this alternative, grazing could occur throughout the entire grazing year (3/1 to 2/28) or during any portion thereof. If a substantial amount of livestock use were to occur during the vegetations active growth period, detrimental effects could result with the increased pressure from livestock and wild horses. On the other hand, if the majority of use were to occur during the dormant period, the plants would have ample time to re-grow, produce seed and allow younger plants to become established.

Recreation

The implementation of this alternative would have little to no effect on the recreation resources and uses in the project area.

Soils

The implementation of this alternative could have a negative effect on the overall soils resource within the allotment. If this alternative results in the depletion of forbs and perennial grasses, and their replacement by annual weeds, there could be a significant decrease in infiltration, and an increase in sheet and rill erosion.

Invasive/Nonnative/Noxious Weeds

Since there are no noxious weed populations within the allotment, the implementation of this alternative would have no effect.

General Wildlife

The rangeland health assessment completed for this allotment indicated that soils are stable in the allotment and supported functional plant groups that would be expected on this site. Because general wildlife habitat is in good condition and domestic sheep levels would be kept at a moderate level, yearlong sheep grazing would not have a substantial impact on this habitat (Fagerstone and Ramsey 1995). However, use during some summer growing seasons would have an effect on vegetation needed by some species. This alternative would be not as good for general wildlife habitat as the proposed action.

If sheep were to use this allotment yearlong at moderate levels, there could be forage overlap particularly in late summer when pronghorn, mule deer and domestic sheep when most forage is desiccated (Peek and Krausman 1995). Additionally, because pronghorns fawn in areas often used by domestic sheep in the spring, there could be spatial conflicts at pronghorn reproductive sites. Although there are only a few pronghorn and mule deer, and the impacts not tremendous, this alternative would not be as good for pronghorn and mule deer as the proposed action.

Grazing of domestic sheep would not affect mountain lion use of the allotment.

Moderate grazing levels on upland areas as have been practiced in recent years, and that are proposed for this action, would not have an affect on upland game bird species (Guthery 1995).

The proposed well wouldn't be constructed. This would have minimal effects on general wildlife species.

Special Status Species

BLM Sensitive Species

Livestock grazing allows some species to respond positively, some to respond negatively and some to have a mixed response (Finch et al 1993). This means only that some species may use a grazed area more, some may use it less. It doesn't necessarily preclude the presence of a species (Fagerstone and Ramey 1995). Livestock grazing in this allotment is not a threat to the BLM sensitive species because this allotment is in acceptable functioning condition overall for soils and vegetation. Yearlong grazing, however, would have an effect on some types of vegetation used by some BLM sensitive species during spring and summer. These effects would probably indirectly affect seed or flower production needed by some BLM

sensitive species. This alternative would be the least ideal for BLM sensitive species. The proposed well wouldn't be constructed. This would have minimal effects on BLM sensitive species.

Neo-tropical Migratory Birds

The same general effects as identified in season long grazing would apply to yearlong grazing. Additionally, yearlong grazing could have an effect on some types of vegetation used by some migratory bird species during spring and summer even if it didn't permanently damage the vegetation. These effects would probably indirectly affect seed or flower production needed by some species. The more concentrated domestic sheep would be across the landscape in the spring, the more possibility of disturbance of individual migratory bird nesting. While any lost reproduction in this area wouldn't be significant to overall populations, this alternative would be the least ideal for migratory bird species.

The proposed well wouldn't be constructed. This would have minimal effects on migratory bird species.

Wild Horses

Combined with the livestock, additional pressure would be placed on the vegetative resource. This may result in a decline in the overall health of the herd and impact recruitment.

Mitigating Measures

PROPOSED ACTION

None proposed.

NO GRAZING ALTERNATIVE

None proposed.

CONVERSTION TO A YEAR-ROUND OPERATION ALTERNATIVE

None proposed.

Residual Impacts

PROPOSED ACTION

With no mitigating measures proposed, this is not applicable.

NO GRAZING ALTERNATIVE

With no mitigating measures proposed, this is not applicable.

CONVERSTION TO A YEAR-ROUND OPERATION ALTERNATIVE

With no mitigating measures proposed, this is not applicable.

Cumulative Impacts

PROPOSED ACTION

All resource values have been evaluated for cumulative impacts. It has been determined that cumulative impacts would be negligible as a result of the proposed action or alternatives. Although intense OHV use was identified as a use that was impacting some species of wildlife in this allotment, livestock grazing is not adding a cumulative effect to general wildlife or BLM sensitive species because of the light grazing levels and winter use that is outside of critical reproductive times.

The issuance of a term grazing permit for the BlackMountain Allotment is a discrete action, and would cause no known cumulative impacts to the environment when considered in combination with any known or anticipated actions on these or adjacent lands in the past, present, or reasonably foreseeable future.

The grazing levels considered are either no grazing or grazing at moderate levels. Grazing at these levels has not been shown to be injurious to plant or animal species in the area. The effects of grazing at moderate levels, along with associated activities in the management of this allotment such as maintenance or construction of range improvements, would be limited to the immediate area of the allotment. They would not combine with any known, or reasonably foreseen, activities on these or adjacent lands to produce any detrimental cumulative impacts in the area.

NO GRAZING ALTERNATIVE

Refer to the Proposed Action.

CONVERSION TO A YEAR-ROUND OPERATION

Refer to the Proposed Action.

Monitoring

Any monitoring proposed would be done as resources allow. Use Pattern Mapping would be a tool used to identify where livestock tend to concentrate. Photo trend plots would continue to provide a record of trend changes as it relates to forb, shrub, and grass density and diversity. Riparian areas would be monitored for trend as per Technical Reference 1737-11, "*Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas.*

V. CONSULTATION & COORDINATION

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VI. APPENDICES AND/OR ATTACHMENTS

Black Mountain Allotment Map
References
Appendix A - **BLM Sensitive Species associated with Black Mountain Allotment**
Appendix B - **Neo-tropical Migratory Birds, Species of Continental Importance on Black Mountain Allotment**

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APPENDIX A

BLM Sensitive Species associated with Black Mountain Allotment

Animal

Golden Eagle – *Aquila chrysaetos*
Ferruginous Hawk – *Buteo regalis*
Prairie Falcon – *Falco mexicanus*
Juniper Titmouse – *Baeolophus griseus*
Loggerhead shrike- *Lanius ludovicianus* (possible nesting)
Vesper Sparrow – *Pooecetes gamineus*
Gray Vireo – *Vireo vicinior*
Bendire's Thrasher – *Toxostoma bendirei*
Pallid bat – *Antrozous pallidus*
Spotted bat – *Euderma maculatum*
Fringed myotis – *Myotis thysanodes*
Western pipistrelle bat - *Pipistrellus hesperus*
Brazilian free-tailed bat - *Tadarida braziliensis*
California myotis – *Myotis californicus*

APPENDIX B

Neo-tropical Migratory Birds, Species of Continental Importance on Black Mountain Allotment

Salt Desert (Neel 1999) -

Burrowing Owl	*Athene cunicularia*
Loggerhead Shrike	*Lanius ludovicianus*

Western Shrublands (Beidleman 2000) –Species of concern associated with this habitat type in the plan area are,

Shrubsteppe (Beidleman 2000), Sagebrush (Neel 1999)

Sage Sparrow	*Amphispiza belli*
Brewer's sparrow –	*Spizella breweri*
Ferruginous Hawk -	*Buteo regalis*
Prairie Falcon	*Falco mexicanus*
Mourning Dove	*Zenaida macroura*
Northern Harrier	*Circus cyaneus*

Mountain Shrub (Neel 1999; Beidleman 2000)

Virginia's Warbler	*Vermivora virginiae*

Woodland – (Beidleman 2000) Pinyon-juniper woodlands are characteristic of this habitat type. Species of concern associated with this habitat type in the plan area are,

Gray Vireo	*Vireo vicinior*
Pinyon Jay	*Gymnorhinus cyanocephalus*
Swainson's Hawk	*Buteo swainsoni*

Coniferous Forest - (Beidleman 2000) This habitat type includes Ponderosa pine, mixed conifer and spruce-fir among others. Although this type of tree occurs on the east side of the allotment, it is an inclusion within a shrub steppe and talus/cliff habitat. For this reason, it isn't expected to draw or support unique populations of birds.

Cliffs and Talus (Neel 1999)

Golden Eagle	*Aquila chrysaetos*